

**University of California**  
 Environmental Restoration Project, MS M992  
 Los Alamos, New Mexico 87545  
 505-667-0808/FAX 505-665-4747



**U. S. Department of Energy**  
 Los Alamos Area Office, MS A316  
 Environmental Restoration Program  
 Los Alamos, New Mexico 87544  
 505-667-7203/FAX 505-665-4504

*✓*  
 Stu -  
 Do you see  
 any problems with  
 these deviations -  
 let me know ASAP  
 Benito  
 11/24/98

Date: July 22, 1998  
 Refer to: EM/ER:98-232



Mr. Benito Garcia  
 NMED-HRMB  
 P.O. Box 26110  
 Santa Fe, NM 87502

**SUBJECT: POTENTIAL OPERATIONAL DEVIATIONS FROM THE MDA P CLOSURE PLAN**

Dear Mr. Garcia:

The purpose of this letter is to outline potential operational deviations from the approved Closure Plan that may occur during waste removal activities at Material Disposal Area (MDA) P, and to follow-up as requested during the meeting with representatives of the Hazardous and Radioactive Materials Bureau on June 17, 1998, at which these potential operational deviations were discussed.

In November of 1997, detonable pieces of high explosives (HE) were discovered during the excavation of test pits into MDA P. The presence of these detonable pieces of HE has caused a schedule delay in the implementation of the approved Closure Plan in order to re-evaluate all safe operating practices. Depending on whether a risk assessment will be required, Los Alamos National Laboratory may or may not exceed the 24 to 26 months allowed to complete closure activities as depicted in Figures 6-2 and 6-3 of the approved Closure Plan.

The following operational activities have been modified or added to accommodate either safety or waste management issues.

- The site layout has been modified to allow 100-ft buffer areas for safe operating distances (to allow for potential detonation over-pressures) between waste management operations that will proceed concurrently. Waste management operations include excavation, segregation, sorting, decontamination, and treatment. Portable blast shields will be in place to protect personnel from secondary fragments.
- A hand-sorting pad will be constructed west of the interim status 387 Burn Pad. It will consist of a curbed, concrete pad with a water collection sump, underlain by an appropriate liner. Space restrictions require that the pad be built on or near overlapping solid waste management units adjacent to MDA P [16-016(c) and 16-010(b)].



RED LAML TA-16 MDA P  
 TA 16  
 '98

- Water from decontamination and sorting operations will be reused by recycling it through a filtration system. This system will consist of a skid-mounted filter system plumbed to fractionation and holding tanks installed in a bermed area lined for secondary containment. Filters generated as a result of this process will be managed as listed hazardous waste (K045).
- Residues resulting from generator treatment of barium contaminated soils will be sampled and analyzed for proper waste management. The approved Closure Plan generally specifies that sampling and analysis will be done for proper disposition of waste, but does not contain definitive language for residues from onsite treatment.
- The land disposal treatment standard for barium has changed as of May 26, 1998 (*63 FR 28555*). Because barium contaminated soil will be stabilized onsite, the Laboratory requests a determination of whether it should use the updated treatment standard for industrial hazardous waste or whether it could use the new soil treatment standard of a 90% reduction of the concentration of hazardous constituents, capped at 10 times the universal treatment standard.
- Detonable pieces of HE will be segregated from soils by trained, experienced personnel. The HE will be managed as characteristic hazardous waste (D003) and treated by Laboratory personnel at the interim status 387 Burn Pad. Generated soil will not be considered listed hazardous waste (K044) because, to the best of our knowledge, all wastewater treatment sludge from the manufacturing and processing of explosives was burned to remove the characteristic (reactivity) for which it was listed; thereby rendering it no longer listed per the mixture rule. Since detonable pieces of HE will be segregated from soil, the soil will not be considered a reactive characteristic hazardous waste (D003).
- A large volume of clean fill that composes the morphologic feature of MDA P will not be removed, but will be sampled during the Phase II verification activities. The entire southern part of the morphologic feature of MDA P is composed of apparently uncontaminated soils placed during the original construction of the burning grounds in 1950. Waste disposal occurred over the leading edge of the soils and aggregated over time.
- The estimated number of soil samples to be collected during Phase I will be proportional to the reduced estimated volume of waste to be excavated, segregated and managed.
- The schedule for project completion is currently unknown, but may require a plan modification if it deviates from the original schedule specified in Figures 6-2 and 6-3 of the approved Closure Plan.

A table was developed outlining the existing sections of the approved Closure Plan and the potential deviations from the plan. This table is enclosed as requested during the meeting. The Laboratory is in the process of implementing closure activities; therefore, we request your concurrence that all potential deviations may be

July 22, 1998

documented in the Closure Certification Report as operational deviations (unless the "Potential Deviation" column specifies that modification of the Closure Plan is required by July 31, 1998). We are also requesting your assistance with determining the appropriate land disposal treatment standard for barium contaminated soil, as mentioned above.

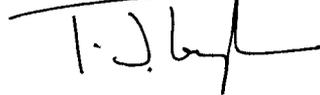
If you wish to further discuss the subject of this letter, please contact Dave McInroy at (505) 667-0819 or Joe Mose at (505) 667-5808.

Sincerely,



Julie Canepa, Program Manager  
EM/ER

Sincerely,



Theodore J. Taylor, Program Manager  
DOE/LAAO

JC/TT/HW/dm

Enclosure: TA-16 MDA P Closure Plan Deviation Review

Cy: K. Bostick, EES-15, MS J495  
J. Elvinger, ESH-19, MS K490  
T. Grieggs, ESH-19, MS M992  
H. Haynes, LAAO, MS A316  
D. McInroy, EM/ER, MS M992  
R. Michelotti, CST-7, MS E525  
V. Rhodes, EM/ER, MS M992  
T. Taylor, LAAO, MS A316  
R. Dinwiddie, NMED-HRMB  
M. Leavitt, NMED-GWQB  
J. Parker, NMED-HRMB  
G. Saums, NMED-SWQB  
S. Yanicak, NMED-AIP, MS J993  
EM/ER File (CT #C084), MS M992  
EM/ER File, MS M992  
RPF, MS M707



		estimate (e.g., a total of approximately 110 composite samples will be collected).
4.2.2 / 4-6	If sample analysis indicates that contamination levels are above the preremoval baseline UTLs, contamination will be removed, and resampling will occur until preexisting baseline levels are reached.	Because the hand sorting pad and the generator treatment area will overlap SWMUs, the areas will be sampled and decontaminated as required.
6.1.1.4 / 6-7	An amendment to the Closure Plan will be submitted to the NMED whenever... a change occurs in the expected year of closure...	The presence of detonable pieces of HE has caused a schedule delay in the implementation of the approved Closure Plan in order to re-evaluate all safe operating practices. If a change of the expected year of closure occurs, an amendment to the Closure Plan will be submitted.
6.1.2.2 / 6-9  6.2.7 / 6-26	If completion of final closure will take longer than 26 months from the time the closure plan is approved, the Laboratory will submit a closure plan amendment...  If a risk assessment is necessary but additional waste removal is not required, the total time to complete closure is estimated to be 26 months... This schedule assumes no unanticipated delays.	Unanticipated delays have been incurred due to the presence of detonable pieces of HE. If it is determined that closure will exceed, the schedules provided in Figures 6-2 and 6-3 of the approved Closure Plan, a plan amendment will be submitted.
6.2.4 / 6-19	Nearby, two 40-ft by 40-ft evaporation ponds will be constructed for the drying of treated soils	The evaporation ponds will not be utilized, but will be replaced by a HE hand-sorting pad of similar dimensions. The hand-sorting pad will be located west of the 387 Burn Pad and will overlap SWMUs 16-016(c) and 16-010(b)
6.2.6 / 6-25	If the treatability study is conducted onsite, the NMED Director will be notified in writing...	A treatability study will be conducted by an off-site laboratory. Current NMED regulatory requirements do not specify notification for off-site treatability studies.

Technical Area 16 MDA P

Closure Plan

Deviation Review

<p>6.2.6 / 6-25</p>	<p>This segregation area will be used for temporary storage of soils/debris in rolloff boxes or other containers and temporary storage of liquids in drums</p>	<p>The segregation area will be used for staging of debris. Large debris will not be staged in containers, small debris will be staged in wire cage pallets to minimize handling. Liquids will be staged in a separate area within MDA P.</p>
<p>6.2.6 / 6-25</p>	<p>The treatment tank used for soil stabilization will be within this segregation area and bermed separately</p>	<p>The treatment system used for soil stabilization will be located in a separate area to the southwest of MDA P</p>